

1 Ruffin B. Cordell (Admitted *Pro Hac Vice* /
cordell@fr.com)
2 Timothy W. Riffe (Admitted *Pro Hac Vice* /
riffe@fr.com)
3 Adam R. Shartzter (Admitted *Pro Hac Vice* /
shartzter@fr.com)
4 R. Andrew Schwentker (Admitted *Pro Hac*
Vice / schwentker@fr.com)
5 Brian J. Livedalen (Admitted *Pro Hac Vice* /
livedalen@fr.com)
6 Michael J. Ballanco (Admitted *Pro Hac Vice* /
ballanco@fr.com)
7 FISH & RICHARDSON P.C.
1000 Maine Avenue, S.W., Suite 1000
8 Washington, DC 20024
Tel: (202)-783-5070
9 Fax: (202) 783-2331

10 *Counsel for Defendant*
MICRON TECHNOLOGY, INC.
11 *Additional counsel listed on signature page*

12 UNITED STATES DISTRICT COURT
13 NORTHERN DISTRICT OF CALIFORNIA
14 SAN FRANCISCO DIVISION

15 MLC INTELLECTUAL PROPERTY, LLC,

16 Plaintiff,

17 v.

18 MICRON TECHNOLOGY, INC.,

19 Defendant.
20

Case No. 3:14-cv-03657-SI

**MICRON'S *DAUBERT* MOTION TO
EXCLUDE EXPERT TESTIMONY AND
OPINIONS OF MICHAEL K. MILANI**

Date: June 5, 2019
Time: 10:00 a.m.
Judge: Hon. Susan Illston
Dept.: Crtrm 1, 17th Floor

21
22 **REDACTED VERSION OF DOCUMENT FILED UNDER SEAL**
23
24
25
26
27
28

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ARGUMENT	3
A.	Legal Standards	3
B.	Mr. Milani's De Facto Entire Market Value Rule Analysis Is Improper	4
1.	Mr. Milani Did Not Show the '571 Patent Drives Consumer Demand for, or Substantially Creates the Value of, Micron's Multi-Level Cell NAND Wafers	5
2.	Mr. Milani Did Not Apportion for Non-Patented Technology	8
a.	Mr. Milani failed to apportion the SSPPU Product Group	8
b.	Mr. Milani's "apportionment" of the non-SSPPU product group fails to account for the value of the non-patented features of those products, which is not a proper apportionment methodology	10
c.	Mr. Milani openly admits he did not have sufficient information for, and therefore, did not apportion [REDACTED] in accused revenue of non-party affiliate IMFT	12
d.	Mr. Milani admits he failed to analyze the non-infringing features of the Micron accused products as compared to the licensed Hynix products, making his reliance on an alleged apportionment factored into the Hynix agreement unreliable.	13
C.	Mr. Milani Wrongly Opines That MLC is Entitled to Damages for Extraterritorial Sales Beyond the Scope of the U.S. Patent Laws	14
1.	Mr. Milani's Revenue Base Includes Foreign Sales	14
2.	Mr. Milani Adopts a Purported U.S.-Only Royalty Rate—Triple the Rate He Claims Comparable Licensees Paid—and Applies it to Micron's Foreign Sales	15
D.	Mr. Milani's Reliance on the Hynix License is Unreliable and Will Cause Juror Confusion	18

1	1.	Mr. Milani Ignores the Effective Royalty Rate Hynix	
2		Actually Paid for Its License and Concocts One Far Higher.....	18
3	2.	Mr. Milani Proposes a Micron Royalty Payment Unmoored	
4		to What Hynix or Others Paid.....	20
5	a.	Mr. Milani’s proposed royalty is orders of	
6		magnitude—three to three and a half times—greater	
7		than Hynix’s, whose relevant revenue is nearly	
8		identical to Micron’s	20
9	b.	Mr. Milani’s bloated royalty payment is for a fraction	
10		of the rights Hynix received	21
11	3.	Mr. Milani Distorts the Hynix License By Alleging 50% or	
12		More of the 41 Licensed Patents’ Value Is Attributable to	
13		the ’571 Patent.....	22
14	E.	Mr. Milani Misapplies the Hypothetical Negotiation Analysis by	
15		Calling for an Upward Adjustment if the Patents are Found Valid	
16		and Infringed.....	23
17	III.	CONCLUSION.....	25

TABLE OF AUTHORITIES**Page(s)****Cases**

<i>Apple, Inc. v. Samsung Elecs. Co.</i> , No. 11-CV-01846-LHK, 2013 WL 5955666 (N.D. Cal. Nov. 6, 2013)	3
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993)	<i>passim</i>
<i>Digital Reg of Texas, LLC v. Adobe Sys., Inc.</i> , 2014 WL 4090550 (N.D. Cal. Aug. 19, 2014)	7, 14, 21
<i>Dynetix Design Sols., Inc. v. Synopsys, Inc.</i> , No. C 11-05973 PSG, 2013 WL 4538210 (N.D. Cal. Aug. 22, 2013)	10
<i>Ericsson, Inc. v. D-Link Systems, Inc.</i> , 773 F.3d 1201 (Fed. Cir. 2014)	16
<i>Finjan, Inc. v. Blue Coat Sys., Inc.</i> , 879 F.3d 1299 (Fed. Cir. 2018)	<i>passim</i>
<i>Georgia-Pacific Corp. v. United States Plywood Corp.</i> , 318 F.Supp. 1116 (S.D.N.Y. 1970)	23, 24
<i>Golden Bridge Tech. v. Apple Inc.</i> , No. 5:12-CV-04882-PSG, 2014 WL 2194501 (N.D. Cal. May 18, 2014)	<i>passim</i>
<i>Good Tech. Corp. v. Mobileiron, Inc.</i> , No. 5:12-CV-05826-PSG, 2015 WL 4090431 (N.D. Cal. July 5, 2015)	<i>passim</i>
<i>Halo Elecs., Inc. v. Pulse Elecs., Inc.</i> , 769 F.3d 1371 (Fed. Cir. 2014)	15
<i>LaserDynamics, Inc. v. Quanta Computer, Inc.</i> , 694 F.3d 51 (Fed. Cir. 2012)	<i>passim</i>
<i>Lucent Techs., Inc. v. Gateway, Inc.</i> , 580 F.3d 1301 (Fed. Cir. 2009)	3, 4, 23, 24
<i>Mahurkar v. C.R. Bard, Inc.</i> , 79 F.3d 1572 (Fed. Cir. 1996)	24
<i>Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.</i> , 711 F.3d 1348 (Fed. Cir. 2013)	14
<i>Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.</i> , 904 F.3d 965 (Fed. Cir. 2018)	5, 6

1	<i>Prism Techs. LLC v. Sprint Spectrum L.P.</i> ,	
2	849 F.3d 1360 (Fed. Cir. 2017)	23
3	<i>ResQNet.com, Inc. v. Lansa, Inc.</i> ,	
4	594 F.3d 860 (Fed. Cir. 2010)	4, 21, 22, 23
5	<i>Sentius Int’l, LLC v. Microsoft Corp.</i> ,	
6	No. 5:13-CV-00825-PSG, 2015 WL 451950 (N.D. Cal. Jan. 27, 2015)	18
7	<i>Uniloc USA, Inc. v. Microsoft Corp.</i> ,	
8	632 F.3d 1292 (Fed. Cir. 2011)	<i>passim</i>
9	<i>Versata Software, Inc. v. SAP Am., Inc.</i> ,	
10	717 F.3d 1255, 1268 (Fed. Cir. 2013)	5
11	<i>VirnetX, Inc. v. Cisco Sys., Inc.</i> ,	
12	767 F.3d 1308 (Fed. Cir. 2014)	<i>passim</i>
13	Statutes	
14	35 U.S.C. § 271(a)	15
15	Other Authorities	
16	Civil Local Rule 7-2	1
17	Civil Local Rule 7-4	1
18	FED. R. EVID. 702	3, 20

NOTICE OF MOTION

PLEASE TAKE NOTICE that on June 5, 2019 at 10:00 a.m., as ordered before the Honorable Susan Illston in Courtroom 1, 17th Fl., U.S. District Court for the Northern District of California, 450 Golden Gate Ave., San Francisco, CA 94102, Defendant Micron Technology, Inc. (“Micron”), by its attorneys, shall and hereby does move the Court to exclude testimony and opinions from Plaintiff MLC Intellectual Property, LLC (“MLC”)’s expert Michael K. Milani.

STATEMENT OF RELIEF SOUGHT

Pursuant to Civil Local Rules 7-2 and 7-4, Micron respectfully asks this Court to exclude the testimony and opinions of MLC’s damages expert Michael K. Milani. Mr. Milani’s testimony and opinions do not achieve the level of reliability required for presentation before a jury. Micron would be prejudiced from having the jury hear Mr. Milani’s unreliable testimony and opinions, and respectfully requests that this Court exclude it.

MEMORANDUM OF POINTS AND AUTHORITIES

I. INTRODUCTION

Mr. Milani’s damages testimony is fundamentally flawed and unreliable for many reasons, each of which forms an independent basis for his testimony to be excluded. Mr. Milani does not properly apportion the value of the ’571 patent relative to the accused Micron products. Indeed, most of his calculations do not apportion out the value of non-patented features whatsoever. The consequence is that Mr. Milani includes the entire market value of the revenue derived from these products in his royalty base, despite not having shown the ’571 patent is the sole driver of consumer demand for them. Controlling law forbids such a theory from being presented to the jury. Even when Mr. Milani purports to apportion revenue, he does so in name only, ignoring major non-patented features of the accused products that contribute significantly to their functionality and revenue. Mr. Milani’s lip service to apportionment does not save his flawed theories from violating controlling damages law.

Mr. Milani also improperly includes in his revenue base Micron’s foreign sales, which are not compensable under U.S. patent law. Presenting these sales has the prejudicial effect of inflating the

royalty base such that the jury's framing of appropriate royalties will be irreparably skewed by what is known as the "cat out of the bag" problem under controlling precedent of the Federal Circuit. Mr. Milani also applies to the foreign sales a royalty rate that he himself characterizes as a U.S.-only rate, resulting in his application of a rate that has no basis in any license agreement to the '571 patent and that is **three times** the rate he alleges others paid in the past for licenses to the *entire* MLC patent portfolio (approximately 40+ individual patent assets), rather than just for the '571 patent alone.

In fact, Mr. Milani's use of past licenses is generally unreliable, as he does not account for the effective royalty rate licensees actually paid via their lump-sum licenses, which is a fraction of the royalty rate he adopts. Also, Mr. Milani fails to account for the relative value of the '571 patent compared to the other patents that were bundled with the '571 patent in past licenses. This error comes from Mr. Milani's misunderstanding that the '571 patent is fundamental to all multi-level cell Flash memory (it is not, as the '571 patent's inventor admitted). (*See* Dkt. No. 421-6 (Banks Tr.) 79:18-24, 147:23-148:7). Finally, Mr. Milani ignored bedrock law by not treating the '571 patent as valid and infringed when forming his opinions. To account for this error, he instructs that the jury should themselves make an unguided upward adjustment of the reasonable royalty payment if the patent is found valid and infringed, an approach barred by precedent.

While this motion will explain these errors in further detail, the absurd result of Mr. Milani's unreliable damages calculation is easily illustrated. Mr. Milani asserts that in a hypothetical negotiation Micron would have agreed to pay for a maximum license period of less than seven years under a single U.S. patent a royalty amount that is **three to three-and-a-half times greater** [REDACTED] **than what Hynix paid for a worldwide license** [REDACTED] **for the full lifetime of an entire portfolio of U.S. and international patents**—where Hynix's revenue for licensed products (worldwide, life of patents) was dramatically higher than Micron's revenue for accused products. Stated differently, Mr. Milani proposes that Micron would have agreed to this exorbitant royalty figure for a mere **2.5% of the total amount of rights Hynix received**, where Micron's hypothetical license being for 1 patent while Hynix's actual license is to [REDACTED] patents.

As these facts suggest, and as the motion will demonstrate, Mr. Milani's opinion loses touch with reality. Mr. Milani intends to offer the jury legally deficient damages calculations that will

incurably compromise their framing of the appropriate damages for this case. Micron will be greatly prejudiced if the jury is permitted to hear this testimony. Micron respectfully requests Mr. Milani's testimony be excluded *in limine* before trial.

II. ARGUMENT

A. Legal Standards

When it comes to expert testimony, "the trial court acts as a 'gatekeeper' by 'making a preliminary determination that the expert's testimony is reliable.'" *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2013 WL 5955666, at *1 (N.D. Cal. Nov. 6, 2013) (quoting *Elsayed Muekhtar v. Cal. State Univ., Hayward*, 299 F.3d 1053, 1063 (9th Cir. 2002); citing *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589–90 (1993)). To reach a jury, an expert's testimony must be "based on sufficient facts or data," must be "the product of reliable principles and methods," and must "reliably appl[y] the principles and methods to the facts of the case." FED. R. EVID. 702.

Damages in patent cases are often calculated using a reasonable royalty approach. "The most common method for determining a reasonable royalty is the hypothetical negotiation approach, which attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began." *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014) (internal citations omitted). An expert's "calculation of the reasonable royalty is a two-step process. First, it requires the determination of a royalty base, or the revenue pool implicated by the infringement. The second determination is the royalty rate, or the percentage of that pool adequate to compensate the plaintiff for that infringement." *Golden Bridge Tech. v. Apple Inc.*, No. 5:12-CV-04882-PSG, 2014 WL 2194501, at *4 (N.D. Cal. May 18, 2014) (Grewal, M.J.) (internal citations omitted). In doing so, "the basic methodological rule" the expert must apply is to "calculate the value of those features that infringe, and cut out the value of all the rest." *Good Tech. Corp. v. Mobileiron, Inc.*, No. 5:12-CV-05826-PSG, 2015 WL 4090431, at *1 (N.D. Cal. July 5, 2015) (Grewal, M.J.) (citing *VirnetX*, 767 F.3d at 1308); *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009)).

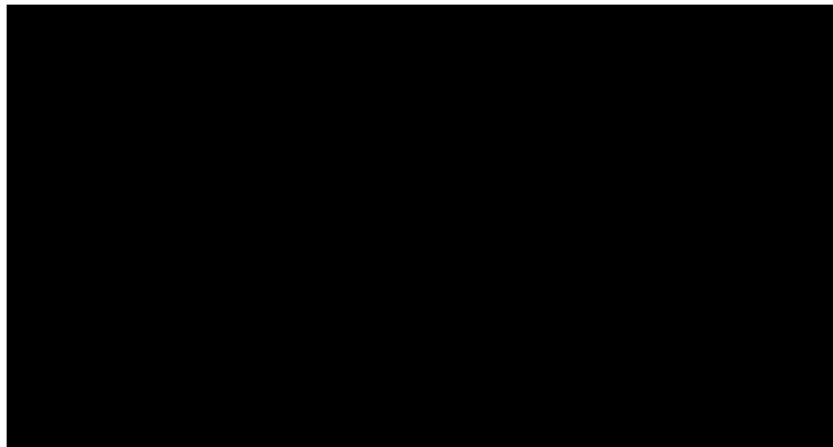
Over the past decade, the Federal Circuit has repeatedly made clear that courts must take an

active role in policing damages theories *before* they are presented to the jury. Expert testimony must be excluded if it relies on too high of a royalty base, a royalty rate not apportioned to account for non-infringing features, or a non-comparable license analysis. These errant theories, if not excluded, can mislead juries into entering damages awards that must be vacated, typically requiring remand and a new trial on damages, at a minimum. Significant examples include:

- *VirnetX, Inc., et al. v. Cisco Systems, Inc., et al.*, 767 F.3d 1308, 1325-29 (Fed. Cir. 2014) (vacating \$368 million verdict where patentee's expert presented a theory based on defendant's entire accused revenues);
- *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012) (vacating jury verdict based on improper consideration of the defendant's entire accused revenues and a non-comparable license);
- *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1311-21 (Fed. Cir. 2011) (affirming order vacating \$388 million verdict where plaintiff improperly relied on infringer's entire accused revenues and applied an arbitrary "25% rule");
- *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 868-73 (Fed. Cir. 2010) (vacating damages award based on non-comparable licenses);
- *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325-32 (Fed. Cir. 2009) (vacating \$357 million jury verdict as a matter of law because plaintiff failed to establish the comparability of its alleged benchmark licenses).

B. Mr. Milani's De Facto Entire Market Value Rule Analysis Is Improper

Mr. Milani's damages approach presents two theories. The first is a "comparable license" approach. The second is an "apportionment," or "SSPPU," approach.



(Ex. 1 (Milani Rpt.) at 67.)— Mr. Milani uses *all* [REDACTED] *in revenue* from Micron's (and its

¹ Unless otherwise stated, all references to "Exhibit" numbers in this motion refer to exhibits cited in accompanying and concurrently filed Declaration of Michael R. Ellis in support of Micron's

1 subsidiaries' and affiliates') accused products—or their entire market value—for the royalty base in
 2 his comparable licensing approach (red box, above). The royalty base for Mr. Milani's second
 3 theory, the smallest saleable patent practicing unit (SSPPU)² approach, is not much different at
 4 [REDACTED]: Mr. Milani includes the entire market value of all revenue from what he calls
 5 "SSPPU products," plus what he calculates as all revenue attributable to the SSPPU within complex
 6 multidimensional products, such as solid state disk drives, (blue box, above). In both instances, Mr.
 7 Milani's approach is fundamentally flawed and unreliable, and it is unfit for a jury's consideration.
 8 See *VirnetX*, 767 F.3d at 1328 ("[T]he district court should have exercised its gatekeeping authority
 9 [under *Daubert*] to ensure that only theories comporting with settled principles of apportionment
 10 were allowed to reach the jury").

11 **1. Mr. Milani Did Not Show the '571 Patent Drives Consumer Demand for,**
 12 **or Substantially Creates the Value of, Micron's Multi-Level Cell NAND**
 13 **Wafers**

14 The Federal Circuit law for when a product's entire market value may be used for a royalty
 15 base is clear: "the entire market value rule is *appropriate only when the patented feature is the*
 16 *sole driver of customer demand* or substantially creates the value of the component parts." *Power*
 17 *Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 904 F.3d 965, 978-79 (Fed. Cir. 2018), *cert. denied*,
 18 No. 18-779, 2019 WL 887884 (U.S. Feb. 25, 2019) (citing *LaserDynamics*, 694 F.3d at 67; *Versata*
 19 *Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1268 (Fed. Cir. 2013); *VirnetX*, 767 F.3d at 1326).
 20 Patentees bear a heavy burden indeed to make this showing, as "[i]t is not enough to merely show
 21 that the patented feature is viewed as valuable, important or even essential to the use of the entire
 22 accused product." *Good Tech.*, 2015 WL 4090431, at *6 (quoting *LaserDynamics, Inc.*, 694 F.3d at 67–
 23 68). If a "product contains other valuable features" then it is MLC's burden to "prove that those
 24 other features do not cause consumers to purchase the product." *Power Integrations*, 904 F.3d at 978–
 25 79. This is true even once a patentee, like MLC here, has separated a product into an SSPPU,
 26 because "if the smallest salable unit—or smallest identifiable technical component—contains non-
 27 infringing features, additional apportionment is still required." *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879
 28 Omnibus Administrative Motion To File Under Seal.

² The parties agree that the smallest saleable patent practicing unit (SSPPU) is a wafer, or bare die.

1 F.3d 1299, 1311 (Fed. Cir. 2018) (quoting *VirnetX*, 767 F.3d at 1326).

2 Mr. Milani admitted that he did not make the necessary findings to use the entire market
3 value rule here. Mr. Milani believes that the '571 patent "provides significant contributions to the
4 demand for the Accused Products." (Ex. 1 (Milani Rpt.) at 59.) But using a SSPPU's entire market
5 value for a royalty base requires more: the SSPPU must not merely be a contributor to consumer
6 demand, it must be the "**sole driver**" of it. *Power Integrations*, 904 F.3d at 978-79. Mr. Milani would
7 not commit that the '571 patent is the sole driver of consumer demand for Micron's bare die, or that
8 it substantially creates their value. At deposition, he testified:

9 Q. Okay. But you're not saying that the '571 patent is a **sole driver** of customer
10 demand for bare wafers, for example?

11 ...

11 THE WITNESS: ***I don't know that I've come to that conclusion, that it's the***
12 ***only driver of demand.*** We mentioned a moment ago that price is also a driver of
demand, so ***by definition it couldn't be the sole driver of demand.***

13 (Ex. 6 (Milani Tr.) at 96:18–97:1.)

14 It is no surprise Mr. Milani could not opine on the sole driver of consumer demand for
15 Micron's bare die: Mr. Milani could not even identify Micron's customers. When asked if he knew
16 who formed Micron's customer base, Mr. Milani responded that "***I don't believe we had a way of***
17 ***understanding who the accused products were specifically sold to.***" (*Id.* at 99:8–21.) When
18 asked whether he conducted his own investigation of Micron's customer base, Mr. Milani responded
19 that "***understanding the specific customers that Micron sold the accused products to was***
20 ***not necessary for me to understand to render the opinions in my report.***" (*Id.* at 99:22–100:9.)
21 Mr. Milani's stunning lack of comprehension on the very sales he is opining on underscores why his
22 testimony—particularly his opinions that rely on the entire market value of the revenue from
23 Micron's products—is inherently unreliable and why it must be shielded from the jury.

24 Mr. Milani also did not attempt to uncover evidence of consumer preferences. To prove a
25 patented feature is the sole driver of consumer demand, courts typically look to evidence that "some
26 customers asked for the [patented] feature." *Power Integrations*, 904 F.3d at 978. Often this evidence
27 is developed using "market studies or consumer surveys." *LaserDynamics*, 694 F.3d at 69. But Mr.
28 Milani did not conduct any consumer surveys to gauge demand. (Ex. 6 (Milani Tr.) at 97:3–23.) Mr.

1 Milani didn't communicate with Micron any customers himself, *id.* at 98:24-99:1, and he did not
 2 review Micron's communications with its customers either, *id.* at 99:2-6. Mr. Milani did not consult
 3 with survey experts, *id.* at 33:19-22, with market analysts, *id.* at 33:23-34:1, or with Micron engineers,
 4 *id.* at 34:6-9. Mr. Milani's failure to investigate consumer demand while relying on the full revenue
 5 value of the accused products is grounds for exclusion. *See Golden Bridge*, No. 2014 WL 2194501, at
 6 *5 (excluding expert whose "testimony makes clear that he did nothing to analyze whether demand
 7 for those devices was actually based on the invention claimed the accused patent.").

8 Mr. Milani asserts his methodology is sound. He claims that by selecting a low enough
 9 royalty rate he properly compensated for his inflated royalty base. (Ex. 6 (Milani Tr.) at 107:10-
 10 108:22.) Not so. In establishing a reasonable royalty opinion, due care must be taken in selecting
 11 both its components: (1) the royalty base, and (2) the royalty rate. As the Federal Circuit has
 12 warned, "***a patentee may not balance out an unreasonably high royalty base simply by***
 13 ***asserting a low enough royalty rate.***" *Virnetx*, 767 F.3d at 1333 (citing *Uniloc*, 632 F.3d at 1320).
 14 This Court has applied this rule in striking damages opinions, interpreting *Uniloc* as expressly
 15 "disapprov[ing] of the plaintiff's use of the entire market value, so long as the royalty rate is 'low
 16 enough.'" *Digital Reg of Texas, LLC v. Adobe Sys., Inc.*, 2014 WL 4090550, at *3 (N.D. Cal. Aug. 19,
 17 2014). That is so because even though "the result of that equation would be mathematically sound
 18 if properly applied by the jury, there is concern that the high royalty base would cause the jury to
 19 deviate upward from the proper outcome." *Virnetx*, 767 F.3d at 1333. Mr. Milani's inflated royalty
 20 base, therefore, must not reach the jury. *See Golden Bridge*, 2014 WL 2194501, at *3 ("[A] critical
 21 prerequisite to this deference to jury wisdom is that the 'the methodology is sound.' Here, it is not.
 22 In calculating the royalty base, Schulze did not even try to link demand for the accused product to
 23 the patented feature.") And here, the problem with Mr. Milani's opinions are even more acute than
 24 the problems with the expert's opinions in the *Golden Bridge* case. There, the expert did not try to
 25 link demand for the accused products to the patented feature. Here, Mr. Milani openly admits that
 26 the '571 patent "by definition" cannot be the sole driver of demand for the accused products. (Ex. 6
 27 (Milani Tr.) at 96:18-97:1.)
 28

1 **2. Mr. Milani Did Not Apportion for Non-Patented Technology**

2 **a. Mr. Milani failed to apportion the SSPPU Product Group**

3 Mr. Milani's error impacts both his comparable license approach and his single saleable
 4 patent practicing unit (SSPPU) approach. For Mr. Milani's comparable license approach, he uses the
 5 entire market value of all of Micron's multi-level cell NAND Flash revenues worldwide with no
 6 apportionment whatsoever. (Ex. 6 (Milani Tr.) at 107:10-19, 61:7-13.) Mr. Milani's SSPPU
 7 approach does not fare much better. There, he uses the entire market value of the revenue from
 8 Micron's bare die when sold alone. (*Id.* at 128:3-129:6.) For multicomponent products such as
 9 complex disk drives with a host of non-patented features, Mr. Milani purports to apportion down to
 10 the revenue associated with the bare die contained within those multi-component products. As
 11 described further below, Mr. Milani's alleged apportionment is flawed, as evidenced by him using
 12 84.6% of the entire market value of the revenue from Micron's multi-level cell NAND Flash in his
 13 non-SSPPU revenue base. In other words, Mr. Milani's opinion is that 84.6% of the revenue of
 14 multi-component products, like solid-state drives for computer file storage, and 100% of the
 15 revenue from sales of multi-level cell NAND Flash die, are attributable to a single patent: the
 16 expired '571 patent. Even if one could accept Mr. Milani's methodology as to multi-component
 17 products as a sound damages approach (which one cannot), Mr. Milani does not attempt to
 18 apportion beyond the entire market value of the revenue from an accused multi-level cell NAND
 19 Flash die even in his SSPPU approach, despite admissions from MLC's experts that such die contain
 20 numerous non-patented features.

21 The law requires more. When the SSPPU is not the sole driver for consumer demand—as
 22 Mr. Milani admits is true here—its value must be apportioned with respect to non-patented
 23 technologies. This is black letter damages law. *See, e.g., Finjan*, 879 F.3d at 1309 (“When the accused
 24 technology does not make up the whole of the accused product, apportionment is required.”); *Golden*
 25 *Bridge*, 2014 WL 2194501, at *5 (“[I]n the absence of evidence that the infringing feature drives
 26 demand, the royalty base must be somehow apportioned to reflect the value of the patent-related
 27 feature in the absence of the non-infringing features.”). Apportionment is critical to the reasonable
 28 royalty analysis so as to “***carefully tie proof of damages to the claimed invention’s footprint in***

1 *the market place.*” *Virnetx*, 767 F.3d at 1327.

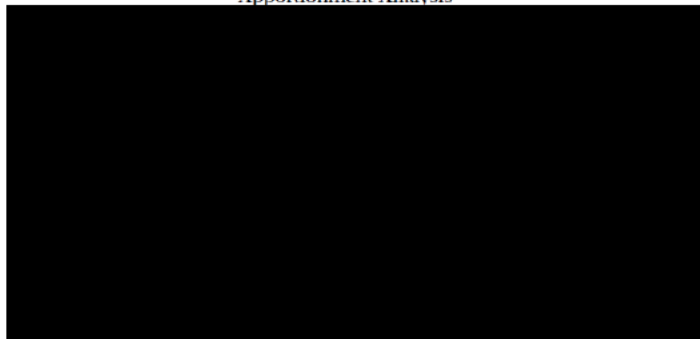
2 Mr. Milani did not appreciate this binding law that apportionment is required. He testified:
 3 “Apportionment can be done in many different ways. *Some of those ways may require*
 4 *consideration of the accused product, but I don’t know that that’s necessarily required* in a
 5 hundred percent of the circumstances.” (Ex. 6 (Milani Tr.) at 56:25-57:4.) Nor did his approach
 6 apply the required apportionment. For his comparable licensing approach, Mr. Milani was direct,
 7 testifying that “*my opinion is that, given the approach I’ve taken, there is no need to*
 8 *apportion to the smallest salable patent-practicing unit.*” (*Id.* at 61:7-12.)

9 For his SSPPU approach, Mr. Milani acknowledged that he did not apportion beyond the
 10 SSPPU: “Q. And you did not apportion beyond the SSPPU when apportioning for the non-SSPPU
 11 products, correct? A. . . . *I used the ASP [average selling price] for the SSPPU group*, but, given
 12 the approach that I’ve taken, I believe that apportionment beyond that is reflected in the royalty
 13 rate.” (*Id.* at 201:7-17.) But focusing on an SSPPU is not, as Mr. Milani assumes, enough: “[I]f the
 14 smallest salable unit—or smallest identifiable technical component—contains non-infringing
 15 features, additional apportionment is still required.” *Finjan*, 879 F.3d at 1311; *see also Golden Bridge*,
 16 2014 WL 2194501, at *6.

17 Mr. Milani’s flawed approach in determining to not apportion the SSPPU products is
 18 illustrated by his report at Figure 17. (Ex. 1 (Milani Rpt.) at 39.) There, Mr. Milani starts his “Before
 19 Apportionment” approach by capturing [REDACTED] in revenue that he associates with the
 20 products he placed in the “SSPPU” group. “After Apportionment,” of the “SSPPU” group, he still
 21 captures the same [REDACTED] in revenue. Mr. Milani performed no apportionment for the
 22 SSPPU products, instead attaching damages to all revenue of those products.

23 Figure 17:

24 Apportionment Analysis²¹⁷



Mr. Milani's approach in not apportioning the SSPPU product group violates a decade's-worth of Federal Circuit precedent, because there are a vast number of non-patented technologies/features captured by Micron's bare die, including micro-fabrication techniques, wear-leveling, and error correction, to name a few. Indeed, Micron identified over 30 different non-patented technologies incorporated into its bare die in response to a MLC interrogatory. (*See* Ex. 22 (2014-12-14 Micron Supp. Rog Resp. 16) at 8 (identifying *inter alia* memory fabrication technology as an exemplary non-patented technology).) However, Mr. Milani provides no explanation for why he has not apportioned for these features in his royalty base. Not doing so is grounds for exclusion. *See Dynetix Design Sols., Inc. v. Synopsys, Inc.*, No. C 11-05973 PSG, 2013 WL 4538210, at *3 (N.D. Cal. Aug. 22, 2013) ("Because Dr. Black relied on the blanket assumption that, once he selected the smallest salable unit—in this case the entire VCS product—he could end the analysis, his determination of the royalty base is fundamentally flawed.").

b. Mr. Milani's "apportionment" of the non-SSPPU product group fails to account for the value of the non-patented features of those products, which is not a proper apportionment methodology.

The only apportionment Mr. Milani purports to perform is in his SSPPU approach and only for the non-SSPPU subset of products. This product grouping includes complex, multi-component products such as solid state drives. Mr. Milani did not, however, specifically consider and apportion out the value of the non-patented features in these products, instead relying on a calculation using the average selling price for an individual SSPPU. The error in Mr. Milani's approach was demonstrated during his deposition, where he was presented with the data sheet for a Micron solid state disk drive that he placed into the non-SSPPU group. The data sheet touted the drive's features, including "RAIN technology," "Power Loss Protection," "Adaptive Thermal Protection," "Extreme Energy Efficient technology" and additional performance and security features. (Ex. 6 (Milani Tr.) at 201:18-205:5.) Mr. Milani then admitted that his alleged apportionment was done "not specifically for these particular features." (*Id.* at 205:11-206:17). In other words, Mr. Milani did not separately determine the value of these features within the context of the revenue derived from the sales of the product.

Yet, Mr. Milani's report concludes that [REDACTED] of the drive's [REDACTED] revenue per die is

1 attributable to the bare die. (*See* Ex. 1 (Milani Rpt.) at Exhibit 3.2.1, pg. 54 (entry for
 2 “CT128MX100SSD1.001”). That is, Mr. Milani concluded that the ***bare die accounted for 92.8%***
 3 ***of the disk drive’s revenue***, with only the remaining 7.2% attributable for all the other recited
 4 features. This was not an anomalous result limited to this specific product either: Mr. Milani’s total
 5 apportionment factor across the non-SSPPU product group is 84.6%. (Ex. 1 (Milani Rpt.) at 39.)
 6 This is apportionment in name only.

7 In *Good Technologies*, this Court rejected a superficial apportionment and should do so again
 8 here:

9 [I]n arriving at a 30/70 split of incremental profit, [expert Weinstein] relies ***on no***
 10 ***analysis of what weight to assign to what feature***. He conducts no survey and
 11 consults no technical experts. In fact, at his deposition he could not explain how he
 12 made the determination or whether any of the inclusion criteria were implicated by a
 13 specific patent.

14 *Good Tech.*, 2015 WL 4090431, at *7 (internal citations omitted). Although his testimony was
 15 excluded, the expert in *Good Technologies* did more than Mr. Milani to analyze, and apportion out, the
 16 specific non-patented product features in the accused products. For example, the expert in *Good*
 17 *Technologies* “relie[d] on Gartner reports, customer testimony and MobileIron employee testimony” in
 18 forming his opinion. *Id.* at *6. In considering the Gartner market data, he concluded that the
 19 products had ten identifiable features, “assign[ed] equal value to each one,” and “use[d] the resulting
 20 30 percent to apportion [the infringer’s] profits.” *Id.* at *7. Where he faltered, however, was that he
 21 made “no investigation into whether any of the criteria is more important than others, or how
 22 strongly each criterion is tied to the patents,” which the Court found to be “insufficient.” *Id.*

23 Mr. Milani did not get far enough in his cursory treatment of the Micron products to
 24 consider how to weigh the non-patented features; indeed, as shown above, he did not even
 25 specifically consider the non-patented features. He also did not examine market data or customer
 26 testimony. (*See* Ex. 6 (Milani Tr.) at 33:19-34:9, 98:24-99:6.) As such, he was not even equipped to
 27 make the mistake the expert made in *Good Technologies*, which highlights the degree to which his
 28 analysis is lacking. The *Good Technologies* expert proposal was also far more apportioned than Mr.
 Milani’s—he proposed that the base be only 30% of the infringer’s profit. Although excluded, this

proposal is more thoughtful and considered than Mr. Milani's, who uses a lockstep apportionment method for a vast number of products resulting in virtually all of Micron's revenue being included in his royalty base. This "arbitrar[y] assign[ing] an equal value to each product feature . . . to apportion the price of the infringer's product . . . lack[s] the requisite indicia of expert reliability." *Id.* (internal citations omitted)).

Mr. Milani's error is compounded exponentially by the sheer number of distinct products in his "non-SSPPU" product group. Mr. Milani lumped nearly 2,700 products—in a list spanning 73 pages in his report—into a single "non-SSPPU" group. Mr. Milani treats these products all the same for apportionment purposes despite the products types contained within varying greatly. Mr. Milani did not consider their different non-patented features, and he did not attempt grouping them into sub-groups with common non-infringing features. This "one size fits all" approach is not in accordance with the law on apportionment because it fails to account for the specific value of non-infringing features. *See Good Tech.*, 2015 WL 4090431, at *1 ("[T]he basic methodological rule for expert analysis remains the same: calculate the value of those features that infringe, and cut out the value of all the rest."). Mr. Milani cannot reason that there were too many accused products to meaningfully apportion them all; it is his burden to apportion regardless of how Micron sells its products. *See Virnetx*, 767 F.3d at 1329 ("VirnetX cannot simply hide behind Apple's sales model to avoid the task of apportionment.").

c. Mr. Milani openly admits he did not have sufficient information for, and therefore, did not apportion [REDACTED] in accused revenue of non-party affiliate IMFT.

MLC also seeks to attach damages to sales revenues from a non-party affiliate of Micron, IMFT. IMFT is a joint venture between Intel and Micron. In attaching damages to IMFT's sales revenues, Mr. Milani openly admits he was "unable to determine the form or configuration of the products sold by IMFT to Intel," to which he attaches damages. (*See* Ex. 1 (Milani Rpt.) at pg. 40.) Further, he admits that he fails to apportion those sales revenues. Here again, Mr. Milani employs the entire market value approach, and applies his [REDACTED] royalty to all of the reported sales revenues of non-party affiliate IMFT. This amounts to an additional total of [REDACTED] in sales that Mr. Milani admits he fails to apportion. The inclusion of those unapportioned sales in the royalty base is

1 shown by Fig. 18 of Mr. Milani's report (highlighted in the red boxes).

2 **Figure 18:**

3 **Apportioned Royalty Base²¹⁸**



4
5
6
7
8 (*Id.* at Fig. 18, pg. 40.) For his failure to apportion, Mr. Milani seeks to place the blame on Mr.
9 Kearsley's "general lack of knowledge" (without citation) regarding those sales revenues. (*Id.* at 40.)
10 Of course, Mr. Kearsley's alleged "lack of knowledge" is not surprising, since he's not an IMFT
11 employee. He is a Micron employee. Indeed, MLC belatedly sought leave to add IMFT as a
12 defendant to this case but was denied. (*See* Dkt. No. 288.) Regardless, it is MLC that bears the
13 burden of proving its damages case. MLC's and Mr. Milani's failure to obtain adequate discovery to
14 perform an apportionment does not absolve either from apportioning to the footprint of the
15 invention of the '571 patent over the prior art. *VirnetX*, 767 F.3d at 1329 ("This court rejects the
16 excuse that 'practical and economic necessity compelled [the patentee] to base its royalty on the
17 price of an entire [device].'" (quoting *LaserDynamics*, 694 F.3d at 69)). Therefore, Mr. Milani's
18 opinions regarding the IMFT sales revenues must be precluded from reaching the jury.

19 **d. Mr. Milani admits he failed to analyze the non-infringing**
20 **features of the Micron accused products as compared to the**
21 **licensed Hynix products, making his reliance on an alleged**
22 **apportionment factored into the Hynix agreement unreliable.**

23 Mr. Milani again tries justifying his high royalty base by suggesting that the Hynix license he
24 relies on already takes care of apportionment of the accused Micron products with its royalty rate.
25 (*See* Ex. 1 (Milani Rpt.) at 34 & n.195.) As explained above, this "it all comes out in the wash"
26 approach does not pass muster, and cannot be used to support an unreasonably high royalty base.
27 *See Virnetx*, 767 F.3d at 1333. But even if it did, relying on the Hynix agreement's alleged royalty
28 rate to apportion out non-patented features of the Micron products does not work here. Mr. Milani
performed no analysis of the accused Micron products as compared to the licensed Hynix products.

For example, Mr. Milani did not investigate what Hynix products were covered under the license agreement. (Ex. 6 (Milani Tr. at 135:14-20.) Mr. Milani spoke to no Micron engineers or Hynix engineers so that he could compare their features. (*Id.* at 34:6-13.) Mr. Milani, at bottom, had no understanding of the features of the Micron products as compared to the features of the Hynix products whatsoever from which to conclude that their apportionment should be identical:

Q. In fact, *you don't know whether there are any differences between the operation of Hynix's products and Micron's products, correct?*

...

[A.] Specifically as to how the products operate and the technical characteristics of that, *I do not have that understanding. That would be correct.*

(Ex. 6 (Milani Tr.) at 195:18-25; *see also id.* at 197:16-25 (admitting neither him nor technical expert compared Micron and Hynix schematics).)

Mr. Milani cannot simply assume the non-patented features of the licensed Hynix products are identical the accused Micron products, and that their apportionment would be identical. *See Finjan*, 879 F.3d at 1312 (“[T]here must be a basis in fact to associate the royalty rates used in prior licenses to the particular hypothetical negotiation at issue in the case.”) (quoting *Uniloc*, 632 F.3d at 1317). For Mr. Milani’s approach to be plausible, he must specifically consider and distinguish the non-patented features in the Micron and Hynix products as compared against each other. Because he did not do so, his opinion should be excluded. *Digital Reg of Texas*, 2014 WL 4090550, at *1 (excluding expert testimony where expert “did not consider [] data specific to [accused infringer]” but “instead relied on data spanning the entire software industry, regardless of the type of software” and where he “did not analyze how differences in the software might affect his calculation.”).

C. Mr. Milani Wrongly Opines That MLC is Entitled to Damages for Extraterritorial Sales Beyond the Scope of the U.S. Patent Laws

1. Mr. Milani’s Revenue Base Includes Foreign Sales

Foreign sales are not compensable for U.S. patent damages determined under a reasonable royalty theory. *See, e.g., Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1371-72 (Fed. Cir. 2013) (“[T]he entirely extraterritorial production, use, or sale of an invention patented in the United States is an independent, intervening act that, under almost all circumstances, cuts off

the chain of causation initiated by an act of domestic infringement.”).³ Mr. Milani, however, includes Micron’s overseas sales in his revenue base. (*See* Ex. 1 (Milani Rpt.) at 31-35; Figs. 9–10, 13, 22; Exs. 5, 5.3, 5.4.) This is not an oversight; Mr. Milani knowingly included these extraterritorial sales in his calculations. (*See, e.g.*, Ex. 6 (Milani Tr.) at 103:24–105:15 (“Q. And you include sales revenue of MTI attributed to sales overseas, correct? A. Yes, sir.”; “Q. . . . [Y]ou include sales revenue of subsidiaries where the products are shipped outside the U.S., correct? A. That’s correct. Yes.”); *see also id.* at 188:17-22, 111:16–114:11, 115:10–117:11, 119:10–121:19.)

Mr. Milani’s inclusion of foreign Micron sales for calculating damages is unreliable and will lead to jury confusion. These sales cannot form the basis for U.S. patent damages because their nature is wholly extraterritorial. ***Mr. Milani was unable to identify any characteristic of these sales that would suggest that they should be included in a U.S. patent damages award.*** For example, products “manufactured, shipped, and delivered to buyers abroad” are almost never considered U.S. sales, but the only possible exception could be for a contract for sale made in the U.S. for overseas sales. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371, 1379, 1381 (Fed. Cir. 2014), *vacated on other grounds*, 136 S. Ct. 356 (2015). But Mr. Milani did not investigate where the contracts underlying Micron’s foreign sales were negotiated or executed, or where their delivery or pricing terms were set. (*See* Ex. 6 (Milani Tr.) at 114:12-15, 121:20-122:22.) Mr. Milani also did not have any reason to believe that any of the products sold abroad ever enter the U.S. (*Id.* at 114:17-115:9.) Therefore, these sales are wholly foreign and, thus, irrelevant. Mr. Milani’s inclusion of these sales in his royalty bases demonstrates error with his methodology, rendering it unreliable.

2. Mr. Milani Adopts a Purported U.S.-Only Royalty Rate—Triple the Rate He Claims Comparable Licensees Paid—and Applies it to Micron’s Foreign Sales

Mr. Milani attempts to rationalize bloated royalty bases by suggesting that, generally, worldwide sales may be used to form a revenue base if the royalty rate is adjusted low enough. (Ex.

³ MLC has suggested that it may rely on a district court case that has been certified to the Federal Circuit to determine whether the cited law should be reexamined in view of recent Supreme Court guidance. For reasons explained more fully in Micron’s motions *in limine* regarding damages, Micron disagrees that the law has changed with respect to reasonable royalties compensable for infringement under 35 U.S.C. § 271(a). Further, the Federal Circuit will likely not decide this issue until after this case had been decided, so the law that stands now is what should apply to this case.

1 (Milani Rpt.) at 54, 67.) In other words, Mr. Milani suggests that a low enough royalty rate can effectively factor out non-compensable foreign sales. According to Mr. Milani, this is how the royalty was calculated for the Hynix license he relies on. (*Id.*) This approach is legally flawed, and, in any event, Mr. Milani never adjusted his royalty rate downward to adjust for the foreign sales in his base, which his methodology assumes must occur.

First, the Federal Circuit has expressly rejected the balancing act approach Mr. Milani suggests is acceptable. In *Ericsson, Inc. v. D-Link Systems, Inc.*, the Federal Circuit explained that while balancing a high royalty base by “dramatically reducing the royalty rate” may arithmetically result in an appropriate royalty, it is nonetheless improper. 773 F.3d 1201, 1227 (Fed. Cir. 2014). The reason is simple: presenting *an inflated royalty base “might mislead the jury, who may be less equipped to understand the extent to which the royalty rate would need to do the work in such instances.”* *Id.* Other Federal Circuit cases have held similarly, explaining that an inflated royalty base “*skew[s] the damages horizon for the jury*,” “only serve[s] to make a patentee’s proffered damages amount appear modest by comparison,” and “*artificially inflate[s] the jury’s damages calculation beyond that which is ‘adequate to compensate for the infringement.’*” *LaserDynamics*, 694 F.3d at 68 (Fed. Cir. 2012) (quoting *Uniloc*, 632 F.3d at 1320; 35 U.S.C. § 284.). In another case, the Federal Circuit required a new trial on damages because a “legally inadequate methodology” resulted in an inflated \$19 billion royalty base, commenting that [t]he “*\$19 billion cat was never put back into the bag*” after the jury saw it. *Uniloc*, 632 F.3d at 1295, 1320. The same concerns are present here, as the jury would surely be misled by Mr. Milani’s presenting a worldwide royalty base of [REDACTED] orders of magnitude greater than the proper (domestic) base. In other words, if Mr. Milani is permitted to present these figures to the jury, the [REDACTED] cat will never be put back into the bag.

Second, even if balancing were permitted, the critical fact remains here: *Mr. Milani did not adjust the royalty rate downward to account for foreign sales.* Mr. Milani’s sleight of hand here is remarkable. According to Mr. Milani, the Hynix license adopts a [REDACTED] royalty rate. Mr. Milani alleges, however, that the parties had an understanding that a [REDACTED] effective royalty rate should

1 apply to Hynix's U.S. sales, *i.e.*, those subject to U.S. patent law.⁴ (*See* Ex. 1 (Milani Rpt.) at 54
 2 ("BTG considered the proper rate to apply to U.S. sales would be [REDACTED]"); *see also* Ex. 6 (Milani Tr.)
 3 at 177:8-179:7, 184:2-186:23.) In other words, Mr. Milani adopts [REDACTED] as the U.S.-only rate. Mr.
 4 Milani reasons that the Hynix parties applied [REDACTED]—to
 5 Hynix's worldwide revenue because only one third of Hynix's worldwide revenue came from U.S.
 6 sales. (*Id.* at 64 ("BTG sought and was able to obtain licenses based on an effective royalty rate of
 7 [REDACTED] applied to worldwide sales, which represented a discount from a [REDACTED] effective royalty rate
 8 applied to U.S. sales."); *id.* at 54 & n.337, 62.)

9 Mr. Milani **does not** similarly adjust the royalty rate for Micron. Instead, he adopts [REDACTED] as
 10 his base royalty rate applied against all of Micron's worldwide sales, including non-U.S. sales for
 11 which no damages can be recovered.⁵ (*See* Ex. 1 (Milani Rpt.) at 66-67.) Moreover, while Mr. Milani
 12 acknowledges that the parties dispute whether Micron's foreign sales are compensable in reasonable
 13 royalty damages, he refuses to adjust his rate even if foreign sales are held to not be compensable:
 14 "[M]y royalty rate is the same regardless of what conclusions are ultimately reached by the Court or
 15 the finder of fact regarding whether or not the different components of sales we've discussed earlier
 16 today can ultimately be included in my royalty base." (*See* Ex. 6 (Milani Tr.) at 189:3-10; *see also id.* at
 17 187:15-25.)

18 The arithmetic simply does not compute here. Mr. Milani has tripled the rate he purports
 19 the Hynix agreement applied to arrive at a U.S.-only rate, but then he applies this U.S.-only rate to
 20 Micron's worldwide sales. This misstep makes Mr. Milani's damages opinion profoundly unreliable,
 21 and it must be excluded. *See Finjan*, 879 F.3d at 1312 ("[T]here must be a basis in fact to associate
 22 the royalty rates used in prior licenses to the particular hypothetical negotiation at issue in the case.")

23 ⁴ As will be described later, this understanding is flawed. Mr. Milani relies on the self-serving
 24 testimony of the MLC portfolio's licensing agent from a different litigation, where patent
 25 infringement damages were not at issue, to reach this conclusion. Neither the Hynix agreement nor
 any of the contemporaneous extrinsic evidence supports a [REDACTED] U.S. rate.

26 ⁵ Mr. Milani ultimately applies a rate of [REDACTED], or half of [REDACTED]. This downward adjustment,
 27 however, is not meant to factor out foreign sales. Instead, this adjustment is to account for the '571
 28 patent being the only patent at issue in this case, whereas 41 patents were licensed in the Hynix
 agreement. (*See* Ex. 1 (Milani Rpt.) at 67.) As will be described later, this adjustment is flawed
 because it assumes the '571 patent represents 50% of the value of the 41-patent portfolio.

(quoting *Uniloc*, 632 F.3d at 1317).

D. Mr. Milani's Reliance on the Hynix License is Unreliable and Will Cause Juror Confusion

In 2007, Hynix executed a license with BTG (the '571 patent's predecessor owner) for a 41-patent portfolio that included the '571 patent. The Hynix license does not come from litigation settlement, but from a pre-suit negotiation between the parties. This license forms the basis of Mr. Milani's opinion.⁶

Past licenses for an infringed patent are frequently considered in determining the reasonable royalty damages due for infringement. However, "use of past patent licenses . . . must account for differences in the technologies and economic circumstances of the contracting parties." *Sentius Int'l, LLC v. Microsoft Corp.*, No. 5:13-CV-00825-PSG, 2015 WL 451950, at *7 (N.D. Cal. Jan. 27, 2015) (quoting *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1211 (Fed. Cir. 2010)). The expert must take care to "tie[] the relevant facts and circumstances of the particular case at issue." *Uniloc*, 632 F.3d at 1318.

Mr. Milani has not exercised the requisite care in analyzing the Hynix license. Mr. Milani repeatedly distorts the realities of the Hynix license, to present an upwardly skewed vision of what Micron's license to the '571 patent would look like. Purporting to use the Hynix license as a guide, Mr. Milani arrives at a [REDACTED] royalty rate for Micron. In so doing, Mr. Milani makes countless errors, missteps and flawed assumptions to reach this arbitrary and unsupported rate. As will be demonstrated, Mr. Milani's opinions and analysis are unsound and must not reach the jury. *See LaserDynamics*, 694 F.3d at 79-81 (holding *Daubert* motion should have been granted to exclude expert testimony based on improper past license analysis).

1. Mr. Milani Ignores the Effective Royalty Rate Hynix Actually Paid for Its License and Concocts One Far Higher

Mr. Milani claims that the Hynix license applies a [REDACTED] royalty rate to Hynix's worldwide

⁶ Mr. Milani also relies somewhat on a license between BTG and Toshiba for the same patent portfolio, but merely in further support of his primary reliance on the Hynix license. (*See* Ex. 1 (Milani Rpt.) at 50.) This motion therefore focuses on the Hynix license. If anything, however, the Toshiba license is less supportive of Mr. Milani's positions than the Hynix license.

multi-level cell NAND Flash memory revenue.⁷ (*See* Ex. 1 (Milani Rpt.) at 47.) This [REDACTED] rate is not contained in the license's payment terms, however. Instead, Hynix made a [REDACTED] lump sum payment for its license. (*See* Ex. 2 (Hynix License) at § 4.1 ("Compensation").) Mr. Milani cites a "most-favored customer" provision in the Hynix license to arrive at the [REDACTED] rate, although that term was not connected to and did not dictate the lump sum Hynix paid. Mr. Milani also cites an extrinsic document that purports to show that, at the time of the license agreement, BTG calculated Hynix's [REDACTED] based on its forecasted future sales through just 2011 despite the fact that the '571 patent did not expire until June 2015 and other licensed patents did not expire until December 2017. (Ex. 6 (Milani Tr.) at 148:20-150:25.) Notably, no forecasts were used for Hynix's licensed sales through December 2017 or even June 2015. Thus, the extrinsic document that forms the basis of Mr. Milani's opinion purported to calculate an effective royalty rate of the Hynix license while ignoring [REDACTED] of Hynix's licensed revenue following 2011. Mr. Milani's reliance on this faulty math renders his opinions unreliable and unsuitable for the jury.

Mr. Milani admits he did not calculate the *effective* royalty rate Hynix actually paid for its licensed sales made through the end of the expiration of the licensed patents. (Ex 2 (Epstein Tr.) at 166:15-167:1 ("I do not know how Hynix's actual extent of use compared to what was forecasted."); *see also id.* at 171:20-172:6.) This calculation would have been straightforward had Mr. Milani cared to perform it; it is: the actual royalty amount Hynix paid [REDACTED] divided by Hynix's revenue for licensed products during the period of the license—namely, multi-level and triple-level cell NAND revenue [REDACTED] from the first sale in 2005 through the '571 patent's expiration on June 9, 2015. The result of this calculation shows that that Hynix, in fact, paid approximately a [REDACTED] *effective rate* on its licensed sales, less than half the [REDACTED] rate Mr. Milani cites.

Mr. Milani had the information to calculate this effective royalty rate at his fingertips, but he failed (or refused) to do so. Mr. Milani's report presents market data showing Hynix's annual NAND revenue. (Ex. 1 (Milani Rpt.) at Exhibit 8.) It also includes the percentage of those NAND

⁷ As explained earlier, Mr. Milani begins with the [REDACTED] worldwide revenue rate he alleges comes from the Hynix agreement, triples it to create a U.S.-only rate of [REDACTED], and then splits it in half to arrive at [REDACTED] because he alleges the '571 patents amounts for half the value of the 41-patent portfolio Hynix licensed. (*See* Ex. 1 (Milani Rpt.) at 66-67.)

1 sales that were to multi-level and triple-level cell products. (*Id.* at Exhibit 11.) Mr. Milani
 2 acknowledged that this data is in his report and that it is reliable. (Ex. 6 (Milani Tr.) at 174:8-25,
 3 175:24-177:7.) Yet, rather than rely on the effective royalty rate for the Hynix agreement, which can
 4 be easily derived from this sales data, Mr. Milani instead relies on a 2007 forecast of future Hynix
 5 sales that ignored several years of Hynix's projected revenue for licensed products and thus
 6 undercounted by [REDACTED]. (See Ex 2 (Epstein Tr.) at 166:15-167:1, 171:20-172:6.)

7 Indeed, MLC's other purported royalty expert, Mr. Epstein, confirmed that the [REDACTED]
 8 effective royalty rate Hynix actually paid is what he'd expect Hynix to have paid:

9 **Q.** Would you be surprised that Mr. Milani included data about the Hynix license, and
 10 from that you can calculate an *effective royalty rate of* [REDACTED]

11 **A.** Well, *that would fit within my licensing model, so, no, I wouldn't be*
 12 *surprised.*

13 (Ex. 21 (Epstein Tr.) at 299:3-8.)

14 Mr. Milani's opinion is not "based on sufficient facts or data," as the law requires, because
 15 Mr. Milani did not consider the effective royalty rate Hynix actually paid via the lump-sum it paid for
 16 its licensed sales. FED. R. EVID. 702. Mr. Milani's analysis instead is mere conjecture based on
 17 demonstrably unreliable information, and must be excluded. See *Golden Bridge*, 2014 WL 2194501, at
 18 *3 (excluding expert who "relied on a maximum, cumulative royalty rate without any showing that
 19 anyone had committed to such a notion"); *Uniloc*, 632 F.3d at 1315 ("Evidence relying on the 25
 20 percent rule of thumb is thus inadmissible under *Daubert* and the Federal Rules of Evidence, because
 21 it fails to tie a reasonable royalty base to the facts of the case at issue.").

22 **2. Mr. Milani Proposes a Micron Royalty Payment Unmoored to What** 23 **Hynix or Others Paid**

24 **a. Mr. Milani's proposed royalty is orders of magnitude—three to** 25 **three and a half times—greater than Hynix's, whose relevant** 26 **revenue is nearly identical to Micron's**

27 Mr. Milani presents two royalty calculations in this case: [REDACTED]

28 These calculations are staggering compared to the [REDACTED] that Hynix paid for its worldwide
 license to 40+ patents. In the proper hypothetical negotiation here, Micron would have required a

license to just one U.S. patent. Mr. Milani provides no justification for a payment by Micron that is three to three-and-a-half times greater than the license forming the basis of his opinion.

Mr. Milani acknowledges that over the relevant time period from 2007 through the expiration of the '571 patent in 2015, "Micron and Hynix captured similar shares of the NAND Flash market," with Micron and Hynix generating [REDACTED] and [REDACTED], respectively, in NAND Flash revenue. (Ex. 1 (Milani Rpt.) at 61.) Mr. Milani further represents that "Micron and Hynix were similarly situated in terms of the proportion of their NAND sales" directed to products covered by the '571 patent. (*Id.*)

Given the similarities between Micron and Hynix, there is no rational explanation for these dramatically different royalty payments, and Mr. Milani offers none. This shows again the unreliability of Mr. Milani's opinions, which must be kept away from the jury. *See ResQNet.com*, 594 F.3d at 873 (rejecting "significantly adjust[ing] upward the reasonable royalty" from past license with no factual basis); *Digital Reg.*, 2014 WL 4090550, at *2 ("To ensure damages figures are not conjectural or speculative, a starting point should be tied to case-specific factors grounded in reliable data, such as . . . other licenses involving the same patent.").

b. Mr. Milani's bloated royalty payment is for a fraction of the rights Hynix received

The degree to which Mr. Milani inflates Micron's royalty calculation is even more transparent considering the disparity in rights that would be granted in the proposed Micron license and the rights the Hynix license did grant. The royalty calculation Mr. Milani makes for Micron is for one patent—the '571 patent. The royalty payment Hynix made was for a license to **41 patents spanning nine countries**—including patents in South Korea, where Hynix manufactured the licensed products. By contrast, the proper hypothetical negotiation would account for Micron only requiring a license under a single U.S. patent, whereas the great majority of Micron's manufacturing and sales activity occur outside the U.S. and thus outside the reach of this single patent. In other words, Mr. Milani's proposed three to three-and-a-half times higher royalty payment by Micron would be for a license conveying a miniscule fraction of the rights Hynix received. Mr. Milani's opinion collapses under the sheer disparity between the Hynix license and the royalty he calculates

for Micron. Mr. Milani's opinion should be excluded. *See ResQNet.com*, 594 F.3d at 873 ("[T]he district court erred by . . . significantly adjust[ing] upward the reasonable royalty without any factual findings that accounted for the . . . economic differences between those licenses and the [infringed] patent.")

3. Mr. Milani Distorts the Hynix License By Alleging 50% or More of the 41 Licensed Patents' Value Is Attributable to the '571 Patent

As described above, the Hynix license Mr. Milani bases his opinion on was for rights to a portfolio consisting of 41 patents. Attempting to account for this difference, Mr. Milani attributes ***50% of the portfolio's value to the single, '571 patent.*** (Ex. 1 (Milani Rpt.) at 66-67; Ex. 6 (Milani Tr.) at 192:1-24.) That is, Mr. Milani's assumes that the '571 patent accounts for half the portfolio's value, and the remaining 40 patents account for the other half, or about 1.25% for each other patent. (*See* Ex. 6 (Milani Tr.) at 193:16-194:5.) This result is simply not credible. It also fails to satisfy the fundamental damages consideration of "***carefully t[ying] proof of damages to the claimed invention's footprint in the market place.***" *Virnetx*, 767 F.3d at 1327.

Mr. Milani performed no independent analysis to conclude that the '571 patent constituted 50% of the portfolio value. For example, Mr. Milani did not determine the "benefits of . . . multi-level cell memory existed in the prior art prior to the '571 patent." (Ex. 6 (Milani Tr.) at 77:5-19.) Instead, Mr. Milani leaned on the opinions of MLC's other experts, Dr. Lee and Mr. Epstein. (*See* Ex. 1 (Milani Rpt.) at 64-66; Ex. 6 (Milani Tr.) at 81:16-23, 193:16-194:5, 82:16-83:13). This does not cure his error, because Dr. Lee and Mr. Epstein's analysis is similarly flawed. Dr. Lee's analysis is deficient, and is the subject of a co-pending *Daubert* motion. (*See* Dkt. No. 421-4 at 10-12.) Further, Mr. Milani did not ask Dr. Lee to compare the '571 patent to the closest prior art. (Ex. 6 (Milani Tr.) at 81:25-82:8.) Mr. Epstein's analysis was similarly conclusory, and he refused to fully identify his basis for it, citing attorney-client privilege. (*See* Ex. 21 (Epstein Tr.) at 184:15-185:11.)

Mr. Milani's conclusion regarding the '571 patent's relative value is based on his understanding that "the '571 patent is more fundamental to the implementation of multi-level cell technology than other patents in the MLCIP Patent Portfolio." (Ex. 1 (Milani Rpt.) at 66.) This flawed premise was demonstrated by the '571 patent's inventor, who acknowledged non-infringing

alternatives exist for multi-level Flash memory. (*See* Dkt. No. 421-6 (Banks Tr.) 79:18-24, 147:23-148:7; Dkt. No. 421-4 at 12.) All in all, Mr. Milani greatly exaggerates the '571 patent's relative value relative to the other patents in the patent portfolio licensed to Hynix. This results in an inflated royalty rate that cannot stand, because "the trial court must carefully tie proof of damages to the claimed invention's footprint in the market place." *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010)

E. Mr. Milani Misapplies the Hypothetical Negotiation Analysis by Calling for an Upward Adjustment if the Patents are Found Valid and Infringed

As explained, Mr. Milani adopts the "hypothetical negotiation" construct for his reasonable royalty analysis, using the *Georgia-Pacific* framework. (Ex. 1 (Milani Rpt.) at 27-28.) Settled law instructs that under the *Georgia-Pacific* hypothetical negotiation, one must "***assume[] that the asserted patent claims are valid and infringed.***" *Lucent*, 580 F.3d at 1325; *see also Prism Techs. LLC v. Sprint Spectrum L.P.*, 849 F.3d 1360, 1369 (Fed. Cir. 2017). Even MLC's other alleged patent licensing expert recognizes that it would be improper to not assume patent validity and infringement in the hypothetical negotiation:

Q. It would not be a proper application of the hypothetical [*Georgia-Pacific*] negotiation if one didn't consider the patents ***valid and infringed***, correct?

...

A. My understanding is ***at the time of the Georgia-Pacific negotiation, you're supposed to assume that those two issues have been resolved.***

(Ex. 21 (Epstein Tr.) at 238:11-20.) Mr. Milani did not make this necessary assumption:

Q. Would you agree that in connection with performing your *Georgia-Pacific* analysis in this case, ***you did not value the assumption of validity and infringement?***

A. I would agree. And I'm sure we'll talk about the nature of my opinions later in the day. But I would agree that the approach I've taken, ***the conclusions I've drawn in my report, do not explicitly account for*** differences between hypothetical negotiations and real-world licenses, one of which I understand to be is ***the assumption of validity and infringement.***

(Ex. 6 (Milani Tr.) at 27:8-19; *see also id.* at 44:7-45:2, 100:17-101:22.)

Mr. Milani's failure to properly apply the *Georgia-Pacific* analysis is alone reason to exclude his testimony. As the Federal Circuit has held, "the analytical framework for assessing a reasonable royalty [is] set forth in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F.Supp. 1116 (S.D.N.Y.

1970).” *LaserDynamics*, 694 F.3d at 60. The Federal Circuit “sanction[s] the use of the *Georgia-Pacific* factors to frame the reasonable royalty inquiry” because “[t]hose factors properly tie the reasonable royalty calculation to the facts of the hypothetical negotiation at issue.” *Uniloc*, 632 F.3d at 1317. As such, the Federal Circuit “review[s] damages award[s] within the *Georgia-Pacific* framework.” *Lucent*, 580 F.3d at 1325. In this review of the “*Georgia-Pacific* factors” the Court must ask “the basic question posed in a hypothetical negotiation” which is if “a willing licensor and licensee had entered into an agreement instead of allowing infringement of the patent to take place, what would that agreement be?” *LaserDynamics*, 694 F.3d at 76. ***“This question cannot be meaningfully answered unless we also presume knowledge of the patent and of the infringement at the time the accused inducement conduct began.”*** *Id.* Mr. Milani’s failure to couple his analysis to the necessary assumptions of validity and infringement makes it unreliable, and it should be excluded for that basis.

In addition to contravening controlling law, Mr. Milani’s flawed non-assumption is impactful and prejudicial. Mr. Milani asserts that his proposed [REDACTED] royalty rate “reflects a minimum rate that does not account for differences between real-world and hypothetical licenses, such as the assumption of validity and infringement. . . . [T]he jury will hear testimony about those differences and may determine that it’s proper to account for those.” (Ex. 6 (Milani Tr.) at 42:5-20.) That is, Mr. Milani proposes an upward adjustment in his royalty calculation if the patents are found valid and infringed: “the jury may find that additional consideration is -- is necessary to be given to that assumption.” (*Id.* at 27:20-28:7.)

Federal Circuit precedent prohibits these types of litigation-driven upward adjustments, or “kickers,” to reasonable royalty calculations. In reversing a trial court’s inclusion of a 9% upward adjustment on top of a calculated reasonable royalty, the Federal Circuit explained that its precedent “does not authorize additional damages or a ‘kicker’ on top of a reasonable royalty because of heavy litigation or other expenses.” *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1581 (Fed. Cir. 1996). This prohibition is especially true here where the alleged kicker comes from an assumption that already should have been baked into Mr. Milani’s analysis.

Worse, Mr. Milani leaves the jury on their own—without any guidance at all—to decide how

much to adjust upward, testifying: “I have no specific opinions on the quantum of any such adjustment.” (*Id.* at 28:5-7.) Instead of providing the jury with a complete and fully considered damages opinion, Mr. Milani has performed some of the work and asks the jury to fill in the blanks on their own. What Mr. Milani is attempting here is clear: he will ask the jury to add a kicker for “real-world” licensing considerations, as described by Mr. Epstein. In fact, Mr. Milani acknowledged that he did not consider “real world” considerations like the assumption of validity and infringement because he “understood Mr. Epstein was addressing those issues in his expert report.” (Ex. 6 (Milani Tr.) at 46:20-47:4.)

Mr. Epstein, MLC’s outside counsel who apparently has a contingent financial interest in the outcome of this case and who also purports to be an expert witness, presents exorbitant royalty rates of [REDACTED] in his report, resulting in a royalty payment range of [REDACTED] if applied by the jury. (*See* Ex. 5 (Epstein Rpt.) at ¶¶ 83-86.) Mr. Epstein developed these rates as a “worst case scenario,” without performing the hypothetical negotiation analysis.⁸ (Ex. 21 (Epstein Tr.) at 241:6-11, 278:20-279:21, 265:20-22.) Yet, Mr. Milani intends to present an incomplete hypothetical negotiation royalty where he apparently believes the jury should fill in the gaps by adding the massive—and unsupported—kicker suggested by Mr. Epstein. *There is no support in the law for this approach*, and the upper bounds of the royalty suggested under it are nearly limitless. Mr. Milani’s blessing of this unbounded upward adjustment for validity and infringement must be excluded, else the “cat will never be put back in the bag.” *Uniloc*, 632 F.3d at 1320.

III. CONCLUSION

For the foregoing reasons, Micron respectfully requests that the Court exclude the testimony and opinions of Michael K. Milani.

⁸ Mr. Epstein’s expert opinion is also deeply flawed and is the subject of a co-pending *Daubert* motion.

1 Dated: April 22, 2019

Respectfully Submitted,

2 FISH & RICHARDSON P.C.

3
4
5 By: /s/ Adam R. Shartzner

6
7 Ruffin B. Cordell (Admitted Pro Hac Vice /
cordell@fr.com) Timothy W. Riffe (Admitted Pro
Hac Vice / riffe@fr.com)

8 Adam R. Shartzner (Admitted Pro Hac Vice /
shartzner@fr.com)

9 R. Andrew Schwentker (Admitted Pro Hac Vice /
schwentker@fr.com)

10 Brian J. Livedalen (Admitted Pro Hac Vice /
livedalen@fr.com)

11 Michael J. Ballanco (Admitted Pro Hac Vice /
ballanco@fr.com)

12 FISH & RICHARDSON P.C.

13 1000 Maine Avenue, S.W., Suite 1000

14 Washington, DC 20024

15 Tel: (202)-783-5070

16 Fax: (202) 783-2331

17 Tony Nguyen (*Admitted Pro Hac Vice*)

18 Nguyen@fr.com

19 FISH & RICHARDSON P.C.

20 1221 McKinney Street, Ste. 2800

21 Houston, TX 77010

22 Tel: 713-654-5300

23 Fax: 713-652-0109

24 Jonathan B. Bright (*Admitted Pro Hac Vice*)

25 jbright@fr.com

26 FISH & RICHARDSON P.C.

27 1180 Peachtree Street N.E., 21st Floor

28 Atlanta, GA 30309

Tel: 404-892-5005

Fax: 404-892-5002

Counsel for Defendant

MICRON TECHNOLOGY, INC.